ABSTRACT AMENDMENTS

Replace the Abstract with:

A frequency measuring device can measure the frequency of a noisy power system at high speed. The system voltage is measured at timings obtained by equally dividing one reference-wave period. Voltage vectors are calculated which have ~~their~~ tip ends, each <u>voltage vector</u> consisting of a real part ~~comprising one~~ <u>of a first</u> measured voltage and an imaginary part ~~comprising~~ <u>of</u> another voltage measured at timing 90 degrees before the ~~one~~ <u>first</u> measured voltage. The length of a ~~cord~~ <u>chord</u> connecting ~~between~~ tip ends of adjacent voltage vectors is calculated. A voltage root-mean-square value is calculated from voltages measured between two timings ~~apart~~ <u>spaced</u> from each other by the one reference-wave period. Chord lengths obtained between two timings ~~apart~~ <u>spaced</u> from each other by the one reference-wave period are summed. Based on ~~a~~ <u>the</u> total of the ~~cord~~ <u>chord</u> lengths and the voltage root-mean-square value, there is calculated a phase angle between two adjacent voltage vectors, from which the system frequency is calculated.